

S/032/60/026/011/007/035  
B015/B066

AUTHORS: Klyachko, Yu. A., Shapiro, M. M., and Yakovleva, Ye. F.

TITLE: Phase Analysis of Nitrided Low-carbon Steels Which Also Contain Niobium ✓

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 11,  
pp. 1219-1223

TEXT: The problem of niobium distribution among the phases in nitrided steels is complicated, and publications contain contradictory data (Ref. 1) regarding the phases in the binary systems Nb - C and Nb - N. Brauer and Lessor (Ref. 2) found that in the system Nb - NbC - NbN the NbC has a cubic lattice of the NaCl type. The present authors investigated the composition of the phase components of niobium in steel alloys with low carbon content, but of three different composition, i.e. the steel types 9M 694 (EI694), 9M 847 (EI847), and 9M 851 (EI851). They used two methods of anodic dissolution: once in an electrolyte of the TsNIICM (15% NaCl, 2.5% tartaric acid) at a current density of 1.2 a/cm<sup>2</sup> and a temperature not exceeding 20°C, and, in parallel, with the same

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Phase Analysis of Nitrided Low-carbon  
Steels Which Also Contain Niobium

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samples in an anhydrous electrolyte of VIAM (50 ml HCl and 1150 ml methanol) at 0.025 a/cm<sup>2</sup> and -10°C. The results obtained in both experimental series were in good agreement. It was found (by means of X-ray structure analyses made by S. B. Maslenkov and V. A. Belyayeva) that a phase with cubic lattice (4.428 - 4.435 Å) occurs in the anode deposits. A chemical analysis revealed that the phase contains nitrogen, and it may be seen from the X-ray analysis that no hexagonal lattice occurs which is characteristic of niobium nitride. Thus the compound deposited is niobium nitrocarbide. The nitrogen and carbon contents in the nitrocarbide phase were determined by means of a chemical analysis especially devised for this purpose, and it was found that at lower nitrogen content in the steel the nitrocarbide phase has the composition Nb(C, N)<sub>1.00</sub>; and at the usual nitrogen content (~0.07%) the composition Nb(C, N)<sub>1.10</sub>. There are 5 tables and 8 references: 5 Soviet, 1 German, 1 French, and 1 British.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii im. I. P. Bardina (Central Scientific Research Institute of Ferrous Metallurgy imeni I. P. Bardin)

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S/700/61/000/006/006/018  
D217/D304

AUTHORS: Klyachenko, Yu. A., Shapiro, M. M. and Yakovleva, Ye. F.

TITLE: Phase analysis of nitrides in steel and alloys

SOURCE: Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov. Seminar po zharostoykim materialam. Kiyev, 1960. Trudy no. 6: Khimicheskiye svoystva i metody analiza tugoplavkikh soyedineniy. Kiyev, Izd. vo AS UkrSSR, 1961, 59-63

TEXT: A study of the TiN and Nb (C, N) phases was carried out, and a method was developed for their chemical analysis, initially using synthetic preparations, and subsequently, nitrides separated from nitrided steels and alloys. These methods of analysis are described in detail. The authors have also succeeded in separating chromium nitrides from a nitrided Cr-base alloy by electrolysis at a low current density ( $0.02 \text{ A/cm}^2$ ). This phase was identified radiographically, as well as by determination of nitrogen in the electrolytic deposit. Zr and V nitrides can be separated by the

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Phase analysis of ...

S/700/61/000/006/006/012  
D217/D304

same method. There are 3 figures, 3 tables and 4 references: 3 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut  
chernoy metallurgii imeni I. P. Bardina (Central  
Scientific Research Institute of Ferrous Metallurgy,  
imeni I. P. Bardin)

Card 2/2

S/700/61/000/006/010/018  
D267/D304

AUTHORS: Klyachko, Yu. A., Shapiro, M. M. and Yakovleva, Ye. F.

TITLE: Separation of phase components from the nickel-base alloys and modern methods of their chemical analysis

SOURCE: Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov. Seminar po zharostoykim materialam. Kiyev, 1960. Trudy no. 6: Khimicheskiye svoystva i metody analiza tugoplavkikh soedineniy. Kiyev, Izd-vo AS UkrSSR, 1961, 80-87

TEXT: The authors investigated by the method of phase analysis the multi-component refractory nickel-base alloys. The electrolytic separation of intermetallic compounds and carbides in Ni alloys containing Al, Ti, Mo, W, Nb and Co was carried out by methods developed at TsNIICM(I) and at VIAM (II). Flowsheets of the two procedures are given and described. It was found that the differences between the quantities of electrolytic deposits, obtained with me-

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S/700/61/000/006/010/018  
D267/D304

# Separation of phase ...

thcd I and II electrolytes from the same sample were small. It was also found that in the alloys under consideration, the phase separation is determined by the magnitude of the potential which is established during dissolution. Both I and II electrolytes used for separating intermetallic compounds have similar dissolution potentials (1.3 - 1.4 V), whereas the corresponding potentials for the electrolytes used for separating carbides amount to 0.4 - 0.7V. The separation of phases is apparently independent of pH, electrical conductivity or current density. The following phases were disclosed by X-ray analysis in the anode residues: 1) Intermetallic phase  $Ni_3Al$  ( $\gamma'$  phase with a face-centered cubic lattice ( $a = 3.56$  kX)); this phase can dissolve Ti, Mo, W, Cr and also Co. 2) Intermetallic phase  $Ni_3$  (Ti, Al) with a face-centered cubic lattice ( $a = 3.58$  kX); this appears either with or without the  $\gamma'$  phase and dissolves W, Cr, Mo and other elements. 3) Intermetallic phase  $Ni_3Ti$ , separated from alloys of the XH80T (KhN80T) type after aging at  $850^{\circ}C$  for 300 - 2000 hours. It has a dense hexagonal lat-

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Separation of phase ...

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tice ( $a = 5.11 \text{ kX}$ ,  $c = 8.31 \text{ kX}$ ,  $c/a = 1.63$ ). These phases contained  $\text{MeC}$  and  $\text{Me}_{23}\text{C}_6$  (only one multi-component alloy disclosed a carbide of the  $\text{Me}_6\text{C}$  type). It was shown that some carbides can be completely separated. The authors used colorimetric methods to determine Al, Nb, Ti, Mo, Co etc. It was possible to obtain reproducible and stable results in analyzing intermetallic compounds, nitrides and non-metallic inclusions. For Al content range 0.001 - 0.01% the accuracy of the method was  $\pm 0.0001 - 0.003\%$ . For Nb the absolute accuracy of the method was  $\pm 0.01 - 0.1\%$ ,  $\pm 0.0035 - 0.02\%$  for Ti in the range 0.05 - 2% and  $\pm 0.0001\%$  for Co. Experimental details are given. There are 4 figures, 2 tables and 6 Soviet-bloc references.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii im. I. P. Bardina (Central Scientific Research Institute of Ferrous Metallurgy im. I. P. Bardin)

Card 3/3

S/137/62/000/008/050/065  
A006/A101

AUTHORS: Klyachko, Yu. A., Shapiro, M. M., Yakovleva, Ye. F.

TITLE: Phase analysis of nitrides in steel and alloys

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 8, 1962, 113, abstract 81763  
("Byul. In-t metallokeram. i spets. splayov AN UkrSSR", 1961, no. 6,  
( 59 - 63)

TEXT: To carry out phase analyses of nitrides and carbonitrides of steel, the method of electrolytical dissolving is used with subsequent determination of N by the Kjeldahl method. Electrolysis of Ti-containing steels is performed in an electrolyte of 15% NaCl + 2.5% tartaric acid at 0.6 - 0.7 amp/cm<sup>2</sup> current density. The electrolytic deposit is dissolved in a H<sub>2</sub>SO<sub>4</sub> + KHSO<sub>4</sub> + K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> mixture and N<sub>2</sub> is sublimated in the form of NH<sub>3</sub>. If carbonitrides are absent, TiN is dissolved in aqua regia and Ni<sub>2</sub> is determined from Ti. Al-nitrides are separated out by the chloride method. After disintegrating of the carbides by the nitric-acid method, AlN is dissolved by heating in 5% NaOH and Al is determined from the filtrate. The separation of Nb nitrocarbide is performed in the same electrolyte at 1.2 amp/cm<sup>2</sup> current density. After washing, evaporation and roasting,

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Phase analysis of nitrides in steel and alloys

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A006/A101

H<sub>2</sub>SO<sub>4</sub> (15 ml, spec. weight 1.34), CuSO<sub>4</sub> (1 g), Na<sub>2</sub>SO<sub>4</sub> (10 g) are added to the electrolytic Nb deposit (N, C), and the latter is dissolved during heating. Furthermore, N<sub>2</sub> is determined from the solution by sublimation in the form of NH<sub>3</sub>. Nb is determined from the electrolytic deposit of nitrocarbides by processing with HF. C is determined by the barytic method. In the same electrolyte Cr, Zr, V nitrides are separated out at 0.02 amp/cm<sup>2</sup> current density.

V. Zhuravska

[Abstracter's note: Complete translation]

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S/081/62/000/019/013/053  
B144/B180

AUTHORS: Klyachko, Yu. A., Shapiro, M. M., Yakovleva, Ye. F.

TITLE: Separation of phase components from nickel-base alloys and modern methods for their chemical analysis

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 19, 1962, 120, abstract 19D105 (Byul. In-t metallokeram. i spets. splavov AN USSR, no. 6, 1961, 80 - 87)

TEXT: The intermetallic and carbide phases in Ni alloys containing Al, Ti, Mo, W, Nb, and Co are separated electrochemically. The elements above are determined photometrically in the resulting mixture of carbides and intermetallic compounds: Al with Aluminon after reducing  $Fe^{3+}$  by ascorbic acid (Al is separated from large quantities of Ti, Cr, V, Nb, and other components by precipitating as cryolite from weak sulfate solutions); Nb with arsenazo or by photometering K hexaniobate solutions at 234.5 m $\mu$ ; Ti by the peroxide method without separating the accompanying components; Mo by the rhodanide method after reducing  $Mo^{6+}$  to  $Mo^{4+}$  by thiourea in the presence of  $CuSO_4$ ; and Co with nitroso R-salt (the disturbing effect of  $Ni^{2+}$  and  $Fe^{2+}$  is eliminated).  
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Separation of phase components ...

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is eliminated by decomposing the relevant complexes by boiling with  $\text{HNO}_3$ ).  
[Abstracter's note: Complete translation.]

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Card 2/2

KLYACHKO, Yu.A.; YAKOVLEVA, Ye.F.

Electrolytic isolation and chemical analysis of iron tungstide  
and niobide in iron-base alloys. Sbor. trud. TSNIICHM no.24:  
30-38 '62. (MIRA 15:6)  
(Iron alloys—Analysis) (Intermetallic compounds—Analysis)

KLYACHKO, Yu.A.; SHAPIRO, M.M.; YAKOVLEVA, Ye.F.

Phase analysis of chromium steels alloyed with tungsten, molybdenum,  
vanadium, and niobium. Sbor. trud. TSNIICM no.24:45-51 '62.  
(MIRA 15:6)

(Chromium steel—Analysis)

YAKOVLEVA, Ye.F.

Determining aluminum in intermetallic phases. Sbor. trud.  
TSNIICHHM no.24:58-63 '62. (MIRA 15:6)  
(Intermetallic compounds--Analysis) (Aluminum--Analysis)

KLYACHKO, Yu.A.; SHAPIRO, M.M.; YAKOVLEVA, Ye.F.

Analysis of nonmetallic inclusions in stainless steel. Sbor.  
trud. TSNIICM no.24:64-74 '62. (MIRA 15:6)  
(Steel, Stainless--Inclusions)  
(Nonmetallic materials--Analysis)

KLYACHKO, Yu.A.; SHAPIRO, M.M.; YAKOVLEVA, Ye.F.

Analysis of nonmetallic inclusions in carbon steel. Sbor. trud.  
TSNIICHM no.24:75-81 '62. (MIRA 15:6)  
(Steel--Inclusions)  
(Nonmetallic materials--Analysis)



YAKOVLEV, Pavel Yakovlevich; YAKOVLEVA, Yevdokiya Erolovna;  
FOZDNYAKOVA, G.L., red. izd-va; ISIENT'YEVA, P.C.,  
tekhn. red.

[Technical analysis in metallurgy; manual for laboratory  
workers] Tekhnicheskii analiz v metallurgii; spravochnoe ru-  
kovodstvo dlia laborantov. Moskva, Metallurgizdat, 1963.  
287 p. (MIRA 16:2)  
(Metallurgical analysis--Handbooks, manuals, etc.)

YAKOVLEVA, Ye.F.

Electrolytic separation of borides from iron-base alloys with  
additions of chromium, tungsten, and molybdenum. Sbor.trud.  
TSNIICBM no.31:117-120 '63. (MIRA 16:7)  
(Electrochemical analysis) (Iron alloys—Analysis)

YAKOVLEVA, Ye.F.; SMIRNOVA, A.V.; KOSTONOGOV, V.G.

Phase analysis of Fe-Ni-Cr and Fe-Ni-Cr-Mo alloys. Sbor.trud.  
TSNIICHM no.31:121-128 '63. (MIRA 16:7)  
(Iron-nickel-chromium alloys—Met illography)  
(Electrochemical analysis)  
(Phase rule and equilibrium)

YAKOVLEVA, Ye.F.; BELYAYEVA, V.A.

Investigation of carbides precipitated from 12Kh2MFSR steel in  
three different electrolytes. Sbor. trud. TSNIICM no.31:129-132  
'63. (MIRA 16:7)

(Chromium-manganese steel--Analysis)  
(Electrochemical analysis)  
Carbides)

KLIACHKO, Yu.A.; YAKOVLEVA, Ye.F.

Differentiated phase analysis of iron and nickel-base alloys.  
Sbor. trud. TSNIICM no.31:135-143 '63. (MIRA 16:7)  
(Alloys—Metallography) (Phase rule and equilibrium)  
(Electrochemical analysis)

ZIMINA, L.N.; YAKOVLEVA, Ye.F.; ZHARKOVA, D.N.

Carbide analysis of a cast chromium-nickel base alloy. Sbor. trud.  
TSNIICAM no. 32:103-110 '63. (MIRA 16:12)

FEL'DGANDLER, E.G.; YAKOVLEVA, Ye.F.

Distribution of addition elements between the ferrite and the  
austenite of the Khl7N7IU-type steel. Sbor. trud TSNIICGM no.  
35:67-68 '63. (MIRA 17:2)

L 46946-66 ENT(m)/T/EMP(t)/ETI IJP(c) JD/WR

ACC NR: AT6030229

SOURCE CODE: UR/2776/66/000/049/0116/0124

AUTHOR: Yakovleva, Ye. F.; Bogomolova, G. P.; Belyayeva, V. A.

ORG: none

TITLE: Phase analysis of EP164 and EI725 steels, and EI893 alloy

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii. Sbornik trudov, no. 49, 1966. Novyye metody ispytaniy metallov; khimicheskoy kontrol' v metallurgii (New methods in the analysis of metals; chemical control in metallurgy) 116-124

TOPIC TAGS: phase analysis, heat resistant steel, nickel chromium steel, nickel chromium alloy, titanium containing alloy, tungsten containing alloy, aluminum containing alloy/EP164 nickel chromium steel, EP725 nickel chromium steel, EI893 nickel base alloy

ABSTRACT: A method of phase analysis of EP164 and EI725 nickel-chromium steels, and EI893 nickel-base alloy (see Fig. 1) has been developed. In EI893 alloy, 18% of V'-phase was isolated after aging for 15,000 hr at 800C and about 20% of the same phase was isolated after aging for 20,000 hr at 750C. In both cases, significant

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L 46946-56

0

ACC NR: AT6030229

Table I.

Steel or Alloy	Chemical composition, %										
	C	Si	Mn	Cr	Ni	Al	Ti	W	Mo	Ce	B
EI893	0,08	0,50	0,50	15,00	Base	1,20	1,20	8,00	3,50	0,025	0,01
	—	—	—	17,00	—	1,60	1,60	10,00	5,00	—	—
EP164	0,08	0,50	0,50	14,00	22,00	—	1,40	4,00	—	0,025	—
	—	—	1,00	16,00	25,00	—	1,80	5,00	—	—	—
EI725	0,08	0,50	0,50	14,00	36,00	—	1,40	4,00	—	0,025	0,005
	—	—	1,00	16,00	38,00	—	1,90	5,00	—	—	—

quantities of Ti(C, N) were found, but no traces of  $Me_2W$ -base Laves phase were detected. Orig. art. has: 3 figures and 5 tables. [TD]

SUB CODE: 11, / SUBM DATE: none/ ORIG REF: 002

Card 2/2 a/s

RAZINA, T. M.; YAKOVLEVA, Ye. G.

"Traditsii i natsional'noye svoeobrazie v iskusstve sovremennykh  
khudozhestvennykh promyslov RSFSR."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences,  
Moscow, 3-10 Aug 64.

*YAKOVLEVA, YE. I.*

B-12

Category: USSR

Abs Jour: R Zh--Kh, No 3, 1957, 7680

Author : Yakovleva, Ye. I., Rozental, K. I., and Filippov, T. S.

Inst : Not given

Title : On the Mechanism of the Electrochemical Formation of Oxygen Compounds with Chlorine at a Smooth Pt Electrode. I. Investigation of the Kinetics of the Electrochemical Oxidation of  $\text{Cl}^-$  and  $\text{ClO}_3^-$  Ions by Anode Polarography

Orig Pub: Zh. Fiz. Khimii, 1956, Vol 30, No 4, 937-944

Abstract: The polarographic curves for the anodic oxydation of  $\text{Cl}^-$  (I),  $\text{ClO}^-$  (II),  $\text{ClO}_2^-$  (III) and  $\text{ClO}_3^-$  (IV) have been recorded with a rotating Pt electrode for the purpose of investigating the mechanism of the electrochemical formation of compounds of oxygen with chlorine by a previously described method (RZhKhim, 1954, 35690). Sharp waves were obtained for I on a background of 0.9N  $\text{Na}_2\text{SO}_4$  + 0.1N  $\text{H}_2\text{SO}_4$ , for II and III on a background of 1N  $\text{NaCl}$ , and for IV on a background of 6N  $\text{NaClO}_4$ . The half-wave potential  $E_{1/2}$  under these conditions is equal to 1.65, 0.41, 1.07, and 1.72 volts, respectively. The limiting

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*Inst Phys Chem in L. Ya. Karpov, Moscow*

Category: USSR

B-12

Abs Jour: R Zh--Kh, No 3, 1957, 7680

current ( $i_d$ ) is proportional to the concentrations of I-IV over the concentration range  $\sim 10^{-2} - 10^{-3}N$ , in the case of I and IV and  $10^{-2} - 10^{-4} N$  in the case of II and III. For I,  $i_d$  increases by about 20 percent when the rate of change of the potential  $\varphi$  is raised from 4 to 32 mv/sec;  $i_d$  depends on the condition of the Pt surface and on the pH (for H concentrations under 0.2N). In that range of acidity the pH influences the  $E_p$  of I; the slope of the line  $[E, \log (i_d-i)/i]$  increases with increasing pH and becomes constant (160mv) at H concentrations of over 0.2N. In the case of IV a strong dependence of  $E_z$  and  $i_d$  on the pH and on the concentration of background ions is observed;  $i_d$  is independent of the condition of the surface of the Pt electrode and of the rate of change of  $\varphi$ . The slope of the line  $[E, \log (i_d-i)/i]$  is equal to 60-70 mv. The possibility of the polarographic determination of I-IV when present together is shown. It is assumed that in sufficiently concentrated HCl solutions ( $1-10^{-1} N$ ),

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Abs Jour: R Zh--Kh, No 3, 1957, 7680

I is oxidized to  $\text{Cl}_2$ ; in dilute  $\text{HCl}$  solutions ( $10^{-2}$ - $10^{-3}$  N), I is oxidized to IV, and the reaction involves the active oxygen adsorbed at the Pt surface (RZhKhim, 1954, 35690); it is assumed that the rate of the overall process is determined by the rate of the step in which the  $\text{Cl}^-$  ions are oxidized by the oxygen adsorbed at the Pt electrode. It is also assumed that the anodic oxidation of IV to  $\text{ClO}_4$  proceeds by way of the formation of  $\text{ClO}_3$  radicals which are subsequently oxidized by the surface oxygen to  $\text{ClO}_4^-$ .

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APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001962010004-8"

BONDARENKO, L.N.

Problems of the transportation of petroleum products from  
Bashkiria. Trudy NII Transneft' no.3:182-188 '64.  
(MIRA 18:2)

YAKOVLEVA, Ye. I.  
ZAPOLNEN, I. I.

PHASE I BOOK ZEPHANTATION SOV/2216

5(4)

Sveshchaniye po elektrokhemii. 4th, Moscow, 1956.

Trudy... (aborniki) (Transactions of the Fourth Conference on Electrochemistry; Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 608 p. 27th slip inserted. 2,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Odelskiye khimicheskii nauk.

Editorial Board: A.M. Frankin (Resp. Ed.) Academician, O.A. Yasin, Professor, S.I. Zhdanov (Resp. Secretary), B.M. Kabanov, Professor, S.I. Zhdanov (Resp. Secretary), V.M. Kabanov, Professor, Ya. M. Kolotyrkin, Doctor of Chemical Sciences, V.V. Losev, P.D. Lukovtsev, Professor, Z.A. Solov'eva, V.V. Stender, Professor, and G.M. Florianovich; Ed. of Publishing House: N.G. Yegorov; Tech. Ed.: T.A. Prusakova.

PURPOSE: This book is intended for chemical and electrical engineers, physicists, metallurgists and researchers interested in various aspects of electrochemistry.

CONTENTS: The book contains 127 of the 135 reports presented at the Fourth Conference on Electrochemistry sponsored by the Department of Chemical Sciences and the Institute of Physical Chemistry, Academy of Sciences, USSR. The collection pertains to different branches of electrochemical kinetics, double layer theories and galvanic processes in metal electrodeposition and industrial electrolysis. Abridged discussions are given at the end of each division. The majority of reports not included here have been published in periodical literature. No personalities are mentioned. References are given at the end of most of the articles.

Yakovlev, V.I. (Pis'ko-khimicheskiy institut imeni I. Ye. Karpova - Physicochemical Institute imeni I. Ye. Karpov). 241

Kabanov, B.M. (Institute of Electrochemistry, Academy of Sciences, USSR). Mechanism of Oxygen Evolution at Oxide Electrodes 252

Philippov, T.A., and Ye. I. Yakovleva. Study of the Mechanism of the Electrochemical Formation of Oxygen Compounds of Chlorine by the Anode Polarization Method 257

Indey-Guz, Nibor, and Imre Szafarik (Budapest University). Influence of Cations on Oxygen Overvoltage 263

Transactions of the Fourth Conference (Cont.) SOV/2216

Krasil'shchikov, A.I. (Gosudarstvennyy institut azotnykh slozheniy - State Institute of the Nitrogen Industry). 272

Electrochemical Reactions of Oxygen

Gerbovich, M.A. (Deceased), and R.I. Kaganovich (Moscow State University). Study of the Mechanism of Some Anode Processes by Combining Electrochemical and Tagged-Atom Methods 277

Shlygin, A.I., and O.A. Bordenovskiy (Moscow State University). Mechanism of the Electrochemical Oxidation of Some Compounds on Platinum 282

Khomutov, N. Ye. (Moscow Institute of Chemical Technology imeni D.I. Mendeleeva - Moscow Institute of Chemical Technology imeni D.I. Mendeleeva). Mechanism of the Electrolytic Oxidation of Acetone in Alkaline Solutions 287

Khomutov, N. Ye. (Moscow Institute of Chemical Technology imeni D.I. Mendeleeva). Mechanism of Some Irreversible Elect.

Card 12/34

YAKOVLEVA, Yelena Ivanovna; SEMINA, V.F., red.; KARAS', V.D., tekhn.red.

[Golden hands] Zolotyie ruki. Irkutsk, Irkutskoe knizhnoe izd-vo,  
1958. 21 p. (MIRA 13:9)

(Labor and laboring classes)

YAKOVLEVA, Ye.I.; KUDOYAROV, G.Sh.

Economic efficiency of the water transportation of mazut with  
internavigational storage. Trudy NIITransneft' no.3:189-192  
'64. (MIRA 18:2)



YAKOVLEVA, Ye. K.

On several features of electrical activity of the brain in neurosis  
marked by obsessive states. Zh. Nevropat. Psikhiat., '52, 52, no.6,  
20-23. (MLRA 5:7)  
(PsA 27, no.8:6051 '53)

Yakovleva, E.K.

USSR/Human and Animal Physiology - Nervous System.

R-12

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 71132

Author : Yakovleva, E.K.

Title : Some Electrophysiologic Findings in Obsessive Neurotics and Psychotics.

Orig Pub : Coll.; Vopr. teorii i praktiki elektroenc. L. LGU. 1956, 210-216

Abstract : In psychotics more frequently noted were a poorly expressed alpha-rhythm, preponderance of beta-activity, and weak reaction to irritants, in response to both signal systems. In chronic obsessive neurotics, the EEG showed a clear high-amplitude alpha-rhythm of normal or lowered frequency. Reactions of patients on direct and indirect verbal stimuli (particularly emotionally significant ones) may be of short as well as long duration. The EEG findings and investigation of skin-galvanic reactions show that both groups are characterized by disturbances in the mobility of the fundamental nervous processes.

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- 90 -

ZACHEPITSKIY, R.A.; YAKOVLEVA, Ye.K. ,

Pathogenesis of somatic disturbances in hysteria. Sbor. trud. Len.  
nauchn. ob-va neyr. i psikh. no.6:178-183 '59. (MIRA 13:12)

1. Iz kliniki nevrozov instituta imeni V.M. Bekhtereva (nauchnyy  
rukovoditel' i direktor instituta chlen-korrespondent Akademii  
pedagogicheskikh nauk RSFSR prof. V.N. Myasishchev).  
(HYSTERIA)

ZACHEPITSKIY, R.A.; YAKOVLEVA, Ye.K.; GHASOV, V.A.

Group psychotherapy in alcoholism. Sbor. trud. Len. nauchn. ob-va  
nevr. i psikh. no.6:11-19 '59. (MIRA 13:12)

1. Iz kliniki nevrozov i pogranichnykh sotsoyany Institutu imeni  
V.M. Bekhtereva (nauchnyy rukovoditel' otdeleniya i direktor instituta -  
chlen-korrespondent Akademii pedagogicheskikh nauk prof. V.N.  
Myasishchev.

(ALCOHOLISM)

(GROUP PSYCHOTHERAPY)

YAKOVLEVA, Ye.K., Doc Med Sci — (diss) "Pathogenesis, therapy,  
and prophylaxis of obsessional neurosis and psychastonia,<sup>h</sup> ~~from~~ <sup>According to</sup>  
clinical and experimental data." Len, 1959, 21 pp (Len State Order  
of Lenin Inst for the "dvanced Training of Physicians in S.U.  
Kirov) 250 copies (KL, 35-59, 115)

- 55 -

YAKOVLEVA, Ye.K.; BASKINA, M.F.; BOBROVSKAYA, M.N.; KRESLING, Ye.M.; MYAGER,  
V.K.; SHKLYAROVA, E.I.; NIKOLAYEVA, K.N.

Use of hemohormonestimulin in the clinical aspects of neuroses. Akt.  
vop.perel.krovi no.7:195-198 '59. (MIRA 13:1)

1. Klinika nevrozov i pograniichnykh sostoyaniy Gos.psikhonevrolo-  
gicheskogo nauchno-issledovatel'skogo instituta imeni V.M. Bekhtereva  
(direktor i nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR  
prof. V.N. Myasishchev).  
(HORMONES, SEX) (NEUROSIS)

YAKOVLEVNA, Ye. K.; ZACHEPITSKIY, R.A.; CHASOV, V.A.

Group psychotherapy for neurotic patients. Zhur. nerv. i psikh. 59  
no. 10: 1201-1207 '59. (MIRA 13:3)

1. Klinika nevrozov i pograniichenykh sostoyaniy Nauchno-issledovatel'-  
skogo psikhonevrologicheskogo instituta imeni V.M. Bekhtereva (direk-  
tor - prof. V.N. Myasishchev), Leningrad.  
(NEUROSES ther.)  
(PSYCHOTHERAPY GROUP)

MYASISHCHEV, V.N.; ZACHEPITSKIY, R.A.; YAKOVLEVA, Ye.K.

Psychotherapy as a basic method in the treatment of neuroses.

Trudy Gos. nauch.-issl. psikhonevr. inst. no.20:277-285 '59.

(MIRA 14:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy psikhonevrologicheskiy  
institut imeni V.M. Bekhtereva, Leningrad.  
(NEUROSES) (PSYCHOTHERAPY)



ZACHEPITSKIY, Rafail Aleksandrovich; YAKOVLEVA, Yekaterina Konstantinovna;  
SHVAREV, A.I., red.; SHEVCHENKO, T.Ya., tekhn. red.

[Role of improper upbringing in the genesis of neuroses] Rol' nepravil'nogo vospitaniya v proiskhozhdenii nevrozov. Leningrad, Gos. izd-vo med. lit-ry Medgiz, Leningr. otd-nie, 1960. 39 p. (MIRA 14:7)  
(NERVOUS SYSTEM—DISEASES) (CHILDREN—MANAGEMENT)

MYASISHCHEV, V.N. (Leningrad); BASSIN, F.V.; YAKOVLEV, Ye.K. (Moskva)

First Psychiatric Congress in Czechoslovakia. Zhur. nevr.i psikh.  
60 no.10:1391-1396 '60. (MIRA 14:1)

(PSYCHIATRY—CONGRESSES)

YAKOVLEVA, Ye.K.; ZACHEPITSKIY, R.A.; STRAUMIT, A.Ya.

Relative importance of various methods in the treatment of neuroses.  
Trudy Gos. nauch.-issl. psikhonevr. inst. no.24:19-25 '61.

(MIRA 15:5)

1. Otdeleniye nevrozov i pogranichnykh sostoyaniy Gosudarstvennogo  
nauchno-issledovatel'skogo psikhonevrologicheskogo instituta imeni  
Bekhtereva.

(NEUROSES)

YAKOVLEVA, Ye.K.; ZACHEPITSKIY, R.A.

Catamnesis of patients with neuroses. Zhur.nevr.i psikh. 61 no.10:  
1529-1533 '61. (MIRA 15:11)

1. Klinika nevrozov i pograniichnykh sostoyaniy Nauchno-issledova-  
tel'skogo psikhonevrologicheskogo instituta imeni V.M.Bekhtereva  
(dir. prof. V.N.Myasishchev), Leningrad.  
(NEUROSES)

YAKOVLEVA, Ye.K.; BOBROVSKAYA, M.N.; KRESLING, Ye.M.; MYAGER, V.K.

Trioxazine therapy in the clinic for neuroses. Zhur.nevr.i  
psikh. 62 no.8:1225-1227 Ag '62. (MIRA 15:12)

1. Klinika nevrozov i pogranichnykh sostoyaniy (zav. - doktor  
meditsinskikh nauk Ye.K.Yakovleva) Nauchno-issledovatel'skogo  
psikhonevrologicheskogo instituta imeni V.M.Bekhtereva (dir. -  
kand.med.nauk B.A.Lebedev), Leningrad.  
(NEUROSES) (OXAZINE)

ZACHEPITSKIY, R.A. (Leningrad); YAKOVLEVA, Ye.K. (Leningrad)

Psychosomatic interrelations in sexual disorders in neurosis  
patients. Trudy Gos. nauch. issl. psikhonevr. inst. 29:257-265 '63.  
(MIRA 17:8)

YAKOVLEVA, Ekaterina Nilovna

YAKOVLEVA, Ekaterina Nilovna. Bibliografiia Mongol'skoi narodnoi respubliki  
(sistematicheskii ukazatel' knig i zhurnal'nykh statei na russkom iazyke) pod  
red. F.M. Telezhnikova. Moskva, 1935. 228 p. (Nauchnoissledovatel'skaya  
assotsiatsiia po izucheniiu natsional'nykh ikolonial'nykh problem. no. 16.)  
DN: Z3107. E7112  
NN CU

SO: LC, Soviet Geography, Part I, 1951, uncl.

YAKOVLEV, Ye.N., kand.ekonom.nauk, nauchnyy sotrudnik; FARBEROVA, E.N.,  
nauchnyy sotrudnik; GRUZINOV, V.P., nauchnyy sotrudnik; ROGOVOY,  
L.Z., nauchnyy sotrudnik; SHUTTE, G.G., nauchnyy sotrudnik;  
GORFAN, K.L., nauchnyy sotrudnik; SEREZHKIN, A.S., nauchnyy  
sotrudnik; LYADOV, P.F., nauchnyy sotrudnik; SAVOST'YANOV, V.V.,  
nauchnyy sotrudnik; FILIPPOVA, V.V., nauchnyy sotrudnik; KHOLIN,  
I.A., red.; PONOMAREVA, A.A., tekhn.red.

[Statistical manual on problems of labor and wages in the socialist  
countries of Europe] Statisticheskii sbornik po voprosam truda i  
zarabotnoi platy v evropeiskikh sotsialisticheskikh stranakh.  
Moskva, Gosplanizdat, 1959. 198 p. (MIRA 12:9)

1. Moscow. Nauchno-issledovatel'skiy institut truda. 2. Otdel  
stran narodnoy demokratii Nauchno-issledovatel'skogo instituta  
truda (for all except Kholin, Ponomareva).  
(Europe, Eastern--Labor and laboring classes--Statistics)



BONDARENKO, T.M.; GORBOV, V.G. [Horbov, V.H.]; KOMAROV, I.Z.; VOYTOVICH, O.S. [Voitovych, O.S.]; KAMINSKIY, F.T. [Kamins'kyi, F.T.]; YAKOVLEVA, Ye.O. [IAkovlieva, IE.O.]; YAKOVLEV, S.B. [IAkovliev, S.B.]; YAVONENKO, O.Ya. [IAvonenko, O.IA.]; VISHCHUN, I.A., red.; ALKXSANDROV, M.O., tekhn.red.

[Our territory; brief guide-reference book] Nash kraj; korotkyi putivnyk-dovidnyk. Mykolaiv, Mykolaivs'ka obl.upr.kul'tury, 1958. 94 p. (MIRA 13:2)

1. Nikolayev. Oblastnyi kraieznavchyi muzei. (Nikolayev Province--Guidebooks)

KRUSSER, O.V.; VALAKHANOVICH, A.I.; YAKOVLEVA, Ye.P.; BASKAKOVA, A.A.

Isolation of amino acids from the mycelium of *Actinomyces globisporus streptomycini*. Trudy Len.khim-farm.inst. no.15: 135-140 '62. (MIRA 15:11)

1. Kafedra tekhnologii antibiotikov (zav. - prof. P.A.Yakimov)  
Leningradskogo khimiko-farmatsevticheskogo instituta i Minskiy  
zavod meditsinskikh preparatov (dir. N.G.Semizhon).  
(AMINO ACIDS) (ACTINOMYCES)

YAKOVLEVA, YE. S.

Yakovleva, Ye. S. and Klebanova, Ye. A. "Changes in the living organism under the influence of its living conditions", *Iestestvoznaniye v shkole*, 1949, No. 2, p. 18-23.

SO: U-411, 17 July 53, (*Letopis 'Zhurnal 'nykh Statey*, No. 20, 1949).

YAKOVLEV, N.N.; YAKOVLEVA, Ye.S.

Effect of systematic exercise on biochemical and morphological transformation of muscles. Usp. sovrem. biol. 35 no.1:134-151 Jan-Feb 1953. (GLML 24:3)

1. Leningrad.

YAKOVLEVA

Ye.S.

KOVESHNIKOVA, A.K.; KLEBANOVA, Ye.A.; YAKOVLEVA, Ye.S.; FANTALOVA, V.L.,  
redaktor; TIMOKHIN, S.T., tekhnicheskii redaktor.

[Outlines of human functional anatomy; manual for teachers in  
secondary schools] Ocherki po funktsional'noi anatomii chelovska;  
posobie dlia uchitelei srednikh shkol. Moskva, Izd-vo Akademii  
pedagog. nauk RSFSR, 1954. 339 p. (MLRA 7:12)  
(Anatomy, Human)

COUNTRY : USSR  
CATEGORY :

ABST. JOUR. : RZBiol., No. 4, 1959, No. 282

AUTHOR : Koveshnikova, A. K.; Yakovleva, Ye. S.

INBT. :  
TITLE : Postembryonic Development of Motor Nerve  
Endings of Man and Animals.

ORIG. PUB. : Sb.: Probl. funktsion. morfol. dvigatel'n.  
apparata. L., Medgiz, 1956, 135-146

ABSTRACT : Study of motor nerve endings (NE) in muscles  
of extremities of man and animals (cat, rabbit, dog), at  
different stages of postembryonic development. Up to the  
age of one month, their structure is very simple. Thereafter  
takes place a division of the axis-cylinder into branches  
and formation of endings in the shape of pincers. In the  
pennate muscles (mostly static), as compared with the  
parallel-fiber muscles (mostly dynamic), NE are differ-  
entiated earlier, and index of innervation (ratio of the  
area of the ending to transversal section of muscle fiber)  
is higher. NE develop more rapidly in muscles of distal  
parts of extremities. The nervous apparatus is formed

CARD: 1/2

20

Country : USSR  
CATEGORY :

ABS. JOUR. : RZBiol., No. /, 1959, No. 282

AUTHOR :

ORIG. PUB. :

ABSTRACT : more rapidly in rabbits than in the two other species. In man, during the first 2-3 months after birth the NE have a simple structure; by the 7th month NE of more complex structure appear. At the age of 2-4 years the number of terminal dendrites increases to 4, and the number of end-plate nuclei, to 12-13. By the age of 4-7 years these dendrites become thinner, longer, and often curved in an elaborate pattern. In an adult man the number of terminal dendrites may be up to 8, that of nuclei -- up to 23-26. Differentiation of NE takes place in animals within several months, while in man it lasts for years. It is noted that in all instances, at any age, there are NE of different degree of differentiation.

CARD: 2/2

I. I. Gutner.

YAKOVLEVA, Ye.S.; KONKIN, I.F.; SVADKOVSKIY, B.S.

Fourth Conference on Age Factors in Morphology, Physiology,  
and Biochemistry. Arkh.anat.gist.i embr. 37 no.8:117-122  
Ag '59. (MIRA 12:11)

(AGE)



YAKOVLEVA, Ye.S.

Functional characteristics of the structure and age changes of the  
muscles of the forearm in man. Arkh.anat.gist.i embr. 37 no.12:  
35-44 D '59. (MIRA 13:5)

1. Laboratoriya funktsional'noy morfologii cheloveka i zhivotnykh  
(zav. - kand.biol.nauk A.K. Koveshnikova) Zoologicheskogo instituta  
AN SSSR imeni P.F. Lesgafta. Adres avtora: Leningrad, tsentral'naya  
Universitetskaya naverzhnaya, dom 1, Zoologicheskii instituta  
AN SSSR.

(ARM musc. & tendons)  
(AGING eff.)

BUKIN, Yu.V.; GERLOVIN, Ye.Sh.; YAKOVLEVA, Ye.S.

Survey of the sessions of the Leningrad Society of Anatomists,  
Histologists, and Embryologists in 1959-1960. Arkh. anat. gist.  
i embr. 40 no.3:108-115 Mr '61. (MIRA 14:5)  
(LENINGRAD--ANATOMICAL SOCIETIES)

YAKOVLEVA, Ye.S.

Functional characteristics of the anatomical structure of the forearm muscles in some species of Scuridae. *Ank. anat., gist.*  
1 ombr. 44 no.5:117-127 My '63. (MIRA 17:6)

1. Laboratoriya funktsional'noy morfologii (ispolnyayushchiy  
obyazannosti zav. - starshiy nauchnyy sotrudnik Ye.A. Klebanova)  
Zoologicheskogo instituta AN SSSR, Leningrad.

YAKOVLEVA, Ye.S. (Leningrad, ul. Soyuza pochatnikov, 25a, kv. 40)

Brief news. Arkh. anat., gist. i embr. 47 no. 11:117-123  
II '64 (MIRA 19:1)

KOROBKOV, Anatoliy Vital'yevich, doktor med. nauk, prof.; SHKURDODA,  
Vladimir Antonovich, kand. pedagog. nauk starshiy nauchnyy sotrudnik;  
YAKOVLEV, Nikolay Nikolayevich, doktor biolog. nauk, prof.;  
YAKOVLEVA, Yelena Sergeyevna, kand. biolog. nauk, starshiy nauchnyy  
sotrudnik; KHOTYANOVA, G.B., red.; MANINA, M.P., tekhn. red.

[Physical education for persons of various ages; biological  
fundamentals] Fizicheskaya kul'tura liudei raznogo vozrasta;  
biologicheskie osnovy. Pod red. A.V.Korobkova. Moskva, Izd-vo  
"Kul'tura i sport," 1962. 370 p. (MIRA 16:6)  
(PHYSICAL EDUCATION AND TRAINING)

FRUMKIN, A.N., akademik; KAGANOVICH, R.I.; YAKOVLEVA, Ye.V.; SOBOL', V.V.

Effect of cations on oxygen overvoltage. Dokl. AN SSSR 141 no.6:  
1416-1419 D '61. (MIRA 14:12)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
(Cations) (Oxygen) (Overvoltage)

YAKOVLEVA, Ye. V.

Drug Industry

Quality of production of the chemical and pharmaceutical industry. Med. prom. No. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1952 ~~1953~~, Uncl.

NATRADZE, A.G., kandidat tekhnicheskikh nauk; YAKOVLEVA, Ye.V.

Chemicopharmaceutical industry of the U.S.S.R. and certain other  
countries. Khim.nauka i prom. 1 no.4:461-466 '56. (MLRA 9:11)  
(CHEMISTRY, MEDICAL AND PHARMACEUTICAL)  
(DRUG INDUSTRY)



YAKOVIEVA, Ye.V.

~~XXXXXXXXXX~~  
Chemicopharmaceutical industry during the sixth five-year plan.  
Med.prom. 10 no.3:3-6 J1-S '56. (MIRA 9:11)

1. Glavnoye upravleniye khimiko-farmatssevicheskoy prmyshlennosti.  
(DRUG INDUSTRY)

YAKOVLEVA, Ye. V.

YAKOVLEVA, Ye.V.

Cardiacs and vasomotor drugs produced by the chemicopharmaceutical industry during the sixth five-year plan. Med.prom. 11 no.6:19-21  
Je '57. (MLRA 10:8)

1. Glavnoye upravleniye khimiko-farmatsevticheskoy promyshlennosti  
(VASOMOTOR DRUGS)

TUL'CHINSKAYA, K.Z.; VADOVA, V.A.; YAKOVLEVA, Ye.V.

Study of the influence of increased doses of vitamins on the  
animal organism. Trudy VNIIV 6:192-203 '59. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.  
Biologicheskaya laboratoriya.  
(VITAMINS)

GUSENKOV, P.V.; NATRADZE, A.G.; KORZHENEVSKIY, M.S.; RUBTSOV, M.V.; PERSHIN,  
G.N.; MAGIDSON, O.Yu.; KRAFT, M.Ya.; YAKOVLEVA, Ye.V.; SMIRENSKIY, S.P.

M.D. Riazantsev; obituary. Med.prom. 14 no.2:64 F '60. (MIRA 13:5)

(RIAZANTSEV, MIKHAIL DMITRIYEVICH, 1892-1960)

YAKOVLEVA, Ye.V.; BERNFEL'D, M.I.

Prospects for the development of the pharmaceutical chemical industry.  
Med. prom. 14, no. 5:3-6 My '60. (MIRA 13:9)

1. Ministerstvo zdavookhraneniya SSSR.  
(DRUG INDUSTRY)

YAKOVLEVA, YE. YA.

PHASE I BOOK EXPLOITATION

SOV/5994

Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov. Seminar po zharostoykim materialam. Kiyev, 1960.

Trudy Seminara po zharostoykim materialam, 19-21 aprelya 1960 g. Byulleten' no. 6: Khimicheskiye svoystva i metody analiza tugoplavkikh sovedineniy (Transactions of the Seminar on Heat-Resistant Materials of the Institute of Powder Metallurgy and Special Alloys of the Academy of Sciences of the Ukrainian SSR. Held 19-21 April, 1960. Bulletin no. 6: Chemical Properties and Methods of Refractory Compound Analysis). Kiyev, Izd-vo AN UkrSSR, 1961. 124 p. 1500 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov.

Editorial Board: I. N. Frantsevich; G. V. Samsonov, Resp. Ed.; I. M. Fedorchenko, V. N. Yeromenko, V. V. Grigor'yeva, and T. N. Nazarchuk; Tech. Ed.: A. A. Matveychuk.

Card 1/5

Transactions of the Seminar (Cont.):

SOV/5994

**PURPOSE:** This collection of articles is intended for chemists, engineers, workers at scientific research institutes and plant laboratories, senior students, and aspirants at chemical and metallurgical schools of higher education.

**COVERAGE:** Articles of the collection present the results of studies of the chemical properties of refractory compounds (carbides, borides, nitrides, phosphorides, silicides), refractory and rare metals, and their alloys, and some original methods of analyzing these materials, which are now being utilized in the new fields of engineering. No personalities are mentioned. Each article is accompanied by references, mostly Soviet.

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Kosolapova, T. Ya., and G. V. Samsonov. Chemical Properties of Chromium Carbides and Methods of Their Analysis		38
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YAKOVLEVA, Z.A.; RUBAN, I.G.; PARSHINA, Z.S.

Drying of goby in a conveyor steam dryer. Trudy Azherniro  
no.21:36-40 '63. (MIRA 17:8)

YAKOVLEVA, Z.A.

Mineral content of principal commercial fish caught in the southern and central Atlantic and verification of the correlation between the content of mineral elements and protein.  
Vop. pit. 23 no.1:57-60 Ja-F '64. (MIRA 17:8)

1. Iz tekhnologicheskoy laboratorii (zav. - kand. tekhn. nauk G.K. Koval'chuk) Azovo-Chernomorskogo nauchno-issledovatel'skogo instituta morskogo rybnogo khozyaystva i okeanografii, Kerch'.

YAKOVLEVA, Z.A.

Studying the characteristics of Atlantic fish. Trudy Azherniro  
no.21:46-50 '63. (MIRA 17:8)

ACC NR: AP7005879

SOURCE CODE: UR/0181/66/000/012/3680/3681

AUTHOR: Zaripov, M. M.; Kropotov, V. S.; Livanova, L. D.; Stolov, A. L.; Yakovleva, Zh. S.

ORG: Kazan' State University im. V. I. Ul'yanov-Lenin (Kazanskiy gosudarstvennyy universitet)

TITLE: EPR and optical spectrum of  $\text{Cr}^{3+}$  ions in  $\text{MgF}_2$

SOURCE: Fizika tverdogo tela, v. 8, no. 12, 1966, 3680-3681

TOPIC TAGS: laser material, epr spectrum, luminescence spectrum, optic spectrum, magnesium compound, fluoride, activated crystal, chromium, *crystal impurity, impurity center, impurity level*

ABSTRACT: To check on the two types of EPR spectra observed in  $\text{ZnF}_2$  activated with  $\text{Cr}^{3+}$ , the authors measured the luminescence spectrum of  $\text{Cr}^{3+}$  in single crystals of  $\text{MgF}_2$  to which Li, Na, and Cu were introduced as additives. The crystals with lithium showed an EPR spectrum (at 9.3 GHz) with a line structure having 5, 7, and 3 components when the field was parallel to the z, x, and y axes, respectively. The luminescence spectrum of the same crystals had an intense band with maximum at 7860 Å, a weaker band at 6805 Å, and narrow lines at 7320 and 7620 Å. The levels corresponding to these lines are identified. In the case of the copper impurity, the same EPR and optical spectra were observed but with lower intensity. In addition, a more complicated EPR spectrum with new lines due to several centers is observed. In the crystals with Na impurity or those without any impurity, the EPR spectra observed in the

Card 1/2

UDC: none

ACC NR: AP7005879

crystals with lithium vanishes, and only the complicated EPR spectrum observed with copper is seen. The maximum at 6805 Å in the optical spectrum becomes stronger. The results do not lead to any unique conclusions other than that the excess  $\text{Cr}^{3+}$  charge is compensated by the Li, Na, or Cu in a nonlocal manner. Orig. art. has: 1 figure and 1 formula. [WA-14] [02]

SUB CODE: 20/ SUBM DATE: 28Jun66/ OTH REF: 002

Card 2/2

KLYUCHIKOV, V.N., YAKOVLEVA, Z.I.

Biundulant viral meningoencephalitis in the upper Volga region.  
[with summary in French]. Zhur.nevr. i psikh. 58 no.6:659-664 '58  
(MIRA 11:7)

1. Klinika nervnykh bolezney (dir. - prof. G.G. Sokolynskiy)  
Yaroslavskogo meditsinskogo instituta i 1-ya gorodskaya bol'nitsa  
g. Kostromy (glavnyy vrach A.I. Belov).

(ENCEPHALITIS, EPIDEMIC, enidemiology,  
viral diphasic meningoencephalitis in Russia (Rus))

KALABINA, A.V.; PRILEZHAYEVA, Ye.N.; YAKOVLEVA, Z.I.

Synthesis and transformations of vinyl aryl ethers. Report  
No.18: Addition of mercaptans to vinyl ethers of the aromatic  
series. Izv. Fiz.-khim. nauch.-issl. inst. Irk. un. 5 no.1:  
193-206 '61. (MIRA 16:8)

(Ethers)

(Thiols)

YAKOVLEVA, Z. M.

YAKOVLEVA, Z. M. -- "On the Therapeutic Effect of Streptomycin on the Course of Experimental Friedlander's Pneumonia among Adults and Developing Animals." Leningrad, 1955. (Dissertation for the Degree of Candidate in Medical Sciences).

So.: Knizhnaya Iltopis', No. 7, 1956.



KONDRASHINA, A.M.; YAKOVLEVA, Z.M.

Securing tailing piles at the Tekeli ore dressing plant. TSvet.  
met. 36 no.10:77 0 '63. (MIRA 16:12)

YAKOVLEVA, Z. M. Cand Biol Sci -- (diss) "The Fixation of  
Atmospheric Nitrogen by Nodule-Forming Bacteria of <sup>*alfalfa*</sup>~~Sainfoin~~ and  
~~Lucerne~~ in the Light Chestnut-Brown Soils of Alma-Atinskaya Oblast."  
Alma-Ata, 1957. 16 pp 22 cm. (Kazakh State Univ im S. M. Kirov),  
100 copies (KL, 27-57, 106)

- 22 -

YAKOVLEVA, Z.M.

F-2

USSR/Microbiology - Antibiosis and Symbiosis  
Antibiotics.

Abs Jour: Ref Zhur - Biol., No 18, 1958, 81446

Author : Yakovleva, Z.M.

Inst : -

Title : The Condition of Tuberos Bacteria Under Condi-  
tions of Symbiosis and Molecular Nitrogen  
Fixation.

Orig Pub: Izv. AN SSR, Ser. biol., 1957, No. 2, 241-247

Abstract: It was established that the bacteroidai tissue  
of the small tubers of esparsette and alfalfa  
is heterogeneous as to the numbers and physio-  
logical state of the cells. The density of  
bacteria from the top and middle portions of  
the tuber is higher than from tissue at the  
base. By staining of the bacterial plasma and

Card 1/2 *Inst Soil Science, AS Kaz SSR*

YAKOVLEVA, Z.M.

Studying sainfoin and alfalfa as nitrogen accumulators on the  
irrigated and unirrigated light-colored Chestnut soils of Alma-Ata  
Province. Izv. AN Kazakh. SSR. Ser. biol. no.12:77-91 '57  
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(ALMA-ATA PROVINCE--NITROGEN--FIXATION)  
(ALFALFA) (SAINFOIN)

COUNTRY : USSR  
 CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0  
 APS. JOUR. : RZhBiol., No.23 1958, No. 104599  
 AUTHOR : Yakovleva, Z. M.  
 INST. : Institute of Microbiology and Virology, AS KazSSR  
 TITLE : Effect of the Fungi of Genus Alternaria on the sprouting of Esparcet in the field.  
 ORIG. PUB. : Tr. In-ta mikrobiol. i virusol. AN KazSSR, 1958, 2, 61-65  
 ABSTRACT : The species composition of the fungi of genus Alternaria affecting the seeds and vegetative organs of esparcet was determined: Alternaria tenuis, Al. humicola, Al. geophila. By lowering the germination and the growth vigor of the seeds, fungi of genus Alternaria have also a negative influence on the sprouting of the plants in the field. Hulling the esparcet fruits is recommended as a method of pre-sowing treatment of the seeds, which appreciably increases the sprouting of the plants in the field. -- Ye. S. Arutyunyan

CARD: 1/1

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